

APPLICATION FOR UNITED STATES LETTERS PATENT

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CAM LOCK FOR TRACK SYSTEMS

FIELD OF THE INVENTION

The present invention relates to the field of ornament or light string locking devices designed for use with track system. More specifically the present invention relates to the field of cam based locking devices that removably secure light strings and other objects to or in track systems.

BACKGROUND

It has become common practice to decorate homes, businesses, or other buildings during holiday seasons, such as Christmas, Halloween, Easter, and the like, by attaching strings of lights to achieve a decorative effect. The strings of lights are typically secured beneath overhanging eaves and around gables, and are also positioned to outline architectural features, whether interior or exterior, of the homes and businesses, such as windows, doorways, bars, and the like.

The strings of lights are usually secured in place by simple connectors such as staples, hooks, nails and the like. This method however, due to repetitive installation and removal of the staples, results in considerable marring of the wooden mounting surfaces and also can be dangerous because of potential damage to light string wires. Staples and other sharp objects are not a recommended method of installation but lacking other convenient methods of light string installation are used by many.

Longs strings of lights, as are typically used, are difficult to install and consequently a householder is often inclined to leave the lights in place once they are secured. Although this avoids yearly installation and removal, the strings of lights are

exposed to weather for the full year resulting in their early deterioration and, furthermore, they add nothing to, and in fact detract from, the appearance of a house between holiday seasons. Further, the permanently attached light strings may conveniently express only a single holiday.

5 Light holders have heretofore been devised for attachment to buildings for attaching strings of lights in a regular manner and which afford the light strings some protection from the weather. These light holders required periodic use of a ladder while installing and removing the holiday light strings. Alternately, if the lights are left in place, they are continuously exposed to view. Consequently, unless the homeowner is
10 content to accept the detraction from the aesthetic qualities of this home, the holders must be installed and removed each holiday season, such as Christmas, Halloween, and the like.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a removable/relocatable device
15 that is capable of securing/locking light strings or other objects into a fixed location in a track system.

The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself, however, both as to its structure and its operation together with the additional objects and advantages thereof
20 will best be understood from the following description of the preferred embodiment of the present invention when read in conjunction with the accompanying drawings. Unless specifically noted, it is intended that the words and phrases in the specification and claims be given the ordinary and accustomed meaning to those of ordinary skill in the

applicable art or arts. If any other meaning is intended, the specification will specifically state that a special meaning is being applied to a word or phrase. Likewise, the use of the words "function" or "means" in the Description of Preferred Embodiments is not intended to indicate a desire to invoke the special provision of 35 U.S.C. §112, paragraph 5 6 to define the invention. To the contrary, if the provisions of 35 U.S.C. §112, paragraph 6, are sought to be invoked to define the invention(s), the claims will specifically state the phrases "means for" or "step for" and a function, without also reciting in such phrases any structure, material, or act in support of the function. Even when the claims recite a "means for" or "step for" performing a function, if they also recite any structure, material 10 or acts in support of that means or step, then the intention is not to invoke the provisions of 35 U.S.C. §112, paragraph 6. Moreover, even if the provisions of 35 U.S.C. §112, paragraph 6, are invoked to define the inventions, it is intended that the inventions not be limited only to the specific structure, material or acts that are described in the preferred embodiments, but in addition, include any and all structures, materials or acts that 15 perform the claimed function, along with any and all known or later-developed equivalent structures, materials or acts for performing the claimed function.

BRIEF DESCRIPTION OF THE DRAWINGS

- Figure 1 is a perspective view of the device according to the present invention.
- Figure 2 is a second perspective view of the device according to the present invention.
- 20 Figure 3 is a side view of the device according to the present invention.
- Figure 4 is a second side view of the device according to the present invention.
- Figure 5 is a third side view of the device according to the present invention.
- Figure 6 is a fourth side view of the device according to the present invention.

Figure 7 is a top view of the device according to the present invention.

Figure 8 is a bottom view of the device according to the present invention.

Figure 9 illustrates use of the present invention in an un-locked position.

Figure 10 Illustrates use of the present invention in a locked position.

5 **DESCRIPTION OF PREFERRED EMBODIMENTS**

Referring now to the figures, the present invention is a lock 10 useful for removably securing/locking items into a track system.

The lock 10 according to the present invention has a body 12 with an attached handle portion 14. The body 12 is preferably a rectangular box in shape with, preferably,
10 two opposed, cut-out sections 16. There is a downward portion 18 that projects from a mid-section of the body 12 and attaches to the handle portion 14.

It is critical that the body 12 of the lock 10 according to the present invention have a length that is substantially equal to the width of the track system into which the lock 10 is to be used. This ensures that when used, the body 12 will be able to fit within
15 the track system with the appropriate snug fit. Sides 13 are angled relative to each such that the portion of the body that attached to the downward portion 18 is wider than its opposite side. This allows the body 12, when rotated within a track of a track system, to force sides of the track outward. Further, at least one, preferably two edges 15 of the body 12 are rounded in order to allow the body 12 to more smoothly rotate within the
20 track of a track system.

Preferably, the handle portion 14 is an elongate piece of sufficient size to be securely grasped between two fingers of a user. Most preferably, the handle portion 14 is

substantially rectangular in shape with opposed material saving cut-outs **20**, however any other suitable shape is considered to fall within the scope of the present invention.

Finally, there may be included a stabilization collar **25** that is located on the handle portion **14** adjacent to the downward portion **18**. This stabilization collar **25** may
5 be circular in shape, as illustrated in the figures, it may extend the length of the handle (now shown), or other suitable shape may be used and still fall within the scope of the present invention.

In use, a portion of an item to be movably secured to the track system is placed in the track system. The lock **10** according to the present invention is inserted into the track,
10 adjacent to the item to be secured. The body **12** is, initially, aligned along the length of the track system. The user grasps the handle portion **14** and rotates the entire lock **10** by 90 degrees. This forces the body **12** into snug and secure position within the track system, thereby locking the light string or other object into place in the track system.

There are two primary embodiment contemplated by the instant invention. In the
15 first primary embodiment the length of the handle portion **14** is oriented perpendicular to the length of the body **12**. Thus, when in place (where the body **12** is secure in the track), the handle portion **14** is aligned with the track system and thereby mostly inconspicuous. In the second primary embodiment the length of the handle portion **14** is oriented along the length of the body **12**. Thus, when in place, the handle portion **14** is oriented
20 perpendicular to the length of the track system.

The preferred embodiment of the invention is described above in the Drawings and Description of Preferred Embodiments. While these descriptions directly describe the above embodiments, it is understood that those skilled in the art may conceive

modifications and/or variations to the specific embodiments shown and described herein.

Any such modifications or variations that fall within the purview of this description are intended to be included therein as well. Unless specifically noted, it is the intention of the inventor that the words and phrases in the specification and claims be given the

- 5 ordinary and accustomed meanings to those of ordinary skill in the applicable art(s). The foregoing description of a preferred embodiment and best mode of the invention known to the applicant at the time of filing the application has been presented and is intended for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and many modifications and variations are
- 10 possible in the light of the above teachings. The embodiment was chosen and described in order to best explain the principles of the invention and its practical application and to enable others skilled in the art to best utilize the invention in various embodiments and with various modifications as are suited to the particular use contemplated.